

.

Class Specifications
for the Class:

AGRICULTURAL EQUIPMENT DEVELOPMENT WORKING SUPERVISOR
(AGRIC EQUIP DEV WKG SUPVR)

Duties Summary:

Supervises and participates in the fabrication and construction of, and modification to, prototype and existing agricultural equipment systems and machinery; manages a machine shop and fabrication areas, and supervises all activities therein; assists and advises agricultural engineers, other professionals and students on the technical design and technical development requirements of agricultural equipment systems and machinery used for a variety of agricultural research, instructional and extension purposes; and performs other duties as required.

Distinguishing Characteristics:

This class is distinguished by its responsibility, under general administrative supervision, for independently providing technical assistance to professional engineers, scientists, and graduate students in the design, subsequent development, experimental laboratory and field-testing and modification of prototype agricultural equipment systems and machinery, in addition to its responsibility for supervising and participating in the fabrication and construction of research and experimental machinery and equipment systems, devices and instructional aids, and for performing precision work. Positions in this class are also responsible for managing a machine shop and related areas.

Examples of Duties:

Provides mechanical and equipment design and development advice to faculty, graduate students and others engaged in agricultural engineering research work by determining mechanical requirements and evaluating the feasibility of proposed equipment designs; determines prototype equipment/machinery performance and durability by testing and experimentation in the laboratory and in the field, under actual working conditions, and recommends changes/revisions to designs; performs precision machining, using a micrometer, and participates in the fabrication, construction and assembly of prototype equipment/machinery; supervises and participates in the operation of a variety of test equipment, such as hydraulic component test stands, engine and drive-line component test units; manages a machine shop by scheduling and reviewing all work performed therein, by maintaining documentation records of all projects worked on, by maintaining an adequate

supply of all fabrication materials and supplies, and spare parts, by recommending the necessity for and the make and type of all new shop equipment to be acquired, and by insuring the safety of all shop clients, supervises and participates in the repair of prototype and laboratory machinery/equipment; and supervises and participates in the operation of power machine tools, such as lathes, milling machines, drill presses, Do-All and band saws.

Knowledge and Abilities Required:

Knowledge of: Principles and practices of supervision; recordkeeping; the methods, practices, tools, equipment and materials used in the design and development of new, prototype and existing machinery and equipment systems; tools and principles used in the design, repair, maintenance and modification of mechanical and electrical machinery and equipment systems; and industrial safety and agricultural equipment safety practices and requirements.

Ability to: Plan, lay-out, supervise and evaluate the work of others; coordinate the machine design, fabrication, overhaul, and subsequent development activities of agricultural engineering research operations; repair, and maintain mechanical and electrical equipment; use trades equipment such as welders and cutting torches, milling machines and sheet metal fabrication tools; perform precision machining, using a micrometer; fabricate, assemble, evaluate and resolve design problems of experimental agricultural research machinery; follow oral and written instructions; and work from orally described design concepts, rough sketches and blueprints.

This is the first specification for the new class AGRICULTURAL EQUIPMENT DEVELOPMENT WORKING SUPERVISOR which is a result of the Civil Service Commission's decision on a classification appeal.

Effective date: June 16, 1978

DATE APPROVED: 7/28/82

DONALD BOTELHO
Director of Personnel Services